WHAT IS CLAIMED IS:

1. A method for transporting information over a network comprising:
decomposing a datastream into a plurality of sub-streams; and
communicating said sub-streams between a first network element and a second network element of said network by transporting each one of said sub-streams over one of a plurality of channels, wherein
a bandwidth of said datastream is greater than a bandwidth of any one of said channels.

2. The method of claim 1, wherein
each of said channels is an optical channel.

3. The method of claim 2, wherein
each of said optical channels corresponds to a wavelength.

4. The method of claim 1, wherein
said each one of said sub-streams has a bandwidth that is equal to or less than a bandwidth of a corresponding one of said channels.

5. The method of claim 1, further comprising:
assembling said sub-streams into a reconstructed datastream.

6. The method of claim 5, wherein said assembling comprises:
placing a portion of each of said substreams in a queue, wherein said reconstructed datastream is output by said queue.

7. The method of claim 5, further comprising:
performing protocol processing on said datastream; and
performing protocol processing on said reconstructed datastream.

8. The method of claim 1, further comprising:
performing compression on a one of said datastreams, wherein said one of said datastreams has a bandwidth greater than a corresponding one of said channels.

9. The method of claim 1, wherein said network is an existing network.

10. The method of claim 1, wherein
said network comprises an underlying network infrastructure, and
the method is performed without alteration of said underlying network infrastructure

11. The method of claim 10, wherein said network comprises a fiber-optic system.

12. The method of claim 1, wherein said decomposition comprises:
placing a portion of said datastream in one of a plurality of queues, wherein each of said queues corresponds to a one of said channels.

13. A method for receiving information transported over a network comprising:
receiving a plurality of sub-streams, wherein
said sub-streams are created by decomposing a datastream into said sub-streams,
each of said sub-streams is transported over said network on a corresponding one of a plurality of channels, and
a bandwidth of said datastream is greater than a bandwidth of any one of said channels; and
assembling said sub-streams into a reconstructed datastream.

14. The method of claim 13, wherein
each of said channels is an optical channel.

15. The method of claim 14, wherein each of said optical channels corresponds to a wavelength.

16. The method of claim 13, wherein said each one of said sub-streams has a bandwidth that is equal to or less than a bandwidth of said corresponding one of said channels.

17. The method of claim 13, wherein said assembling comprises: placing a portion of each of said substreams in a queue, wherein said reconstructed datastream is output by said queue.

18. The method of claim 13, further comprising: decomposing said datastream into said sub-streams; and transporting said each of said sub-streams over said network on said corresponding one of a plurality of channels.

19. The method of claim 13, further comprising: performing protocol processing on said datastream; and performing protocol processing on said reconstructed datastream.

20. The method of claim 13, wherein said network is an existing network.

21. The method of claim 13, wherein said network comprises an underlying network infrastructure, and the method is performed without alteration of said underlying network infrastructure

22. The method of claim 21, wherein said network comprises a fiber-optic system.

23. The method of claim 13, wherein said decomposition comprises: placing a portion of said datastream in one of a plurality of queues, wherein

each of said queues corresponds to a one of said channels.

24. An apparatus for transporting information over a network comprising:
a first sub-stream management device, comprising
an input configured to receive a datastream, and
a plurality of outputs, wherein
each of said outputs is configured to output one of a plurality of sub-streams,
each of said sub-streams is transported over said network on a corresponding one of a plurality of channels, and
a bandwidth of said datastream is greater than a bandwidth of any one of said channels.

25. The apparatus of claim 24, wherein
each of said channels is an optical channel.

26. The method of claim 25, wherein
each of said optical channels corresponds to a wavelength.

27. The apparatus of claim 24, wherein
said each one of said sub-streams has a bandwidth that is equal to or less than a bandwidth of said corresponding one of said channels.

28. The apparatus of claim 24, further comprising
a second sub-stream management device, comprising
an output configured to output a reconstructed datastream, and
a plurality of inputs, wherein
each of said inputs is configured to receive one of said sub-streams; and
an underlying network infrastructure, communicatively coupled to said first and said second sub-stream management devices, and comprising said channels.

29. The apparatus of claim 28, further comprising
a first protocol processor, coupled to said input; and
a second protocol processor, coupled to said output.

30. An apparatus for transporting information over a network comprising:
a first sub-stream management device, comprising
an output configured to output a reconstructed datastream, and
a plurality of inputs, wherein
each of said inputs is configured to receive one of a plurality of sub-streams,
said sub-streams are created by decomposing a datastream into said sub-streams,
each of said sub-streams is transported over said network on a corresponding one of a plurality of channels, and
a bandwidth of said datastream is greater than a bandwidth of any one of said channels.

31. The apparatus of claim 30, wherein
each of said channels is an optical channel.

32. The method of claim 31, wherein
each of said optical channels corresponds to a wavelength.

33. The apparatus of claim 30, wherein
said each one of said sub-streams has a bandwidth that is equal to or less than a bandwidth of said corresponding one of said channels.

34. The apparatus of claim 30, further comprising
a second sub-stream management device, comprising
an input configured to receive said datastream, and
a plurality of outputs, wherein

each of said outputs is configured to output one of said sub-streams; and

an underlying network infrastructure, communicatively coupled to said first and said second sub-stream management devices, and comprising said channels.

35. The apparatus of claim 34, further comprising

a first protocol processor, coupled to said input; and

a second protocol processor, coupled to said output.